UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,081	01/22/2002	Eiichiro Kitagawa	03560.002981	3430

5514   7590   09/11/2006

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER
PHAM, CHRYSTINE

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/051,081	KITAGAWA, EIICHIRO
Office Action Summary	Examiner	Art Unit	
	Chrystine Pham	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 July 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>3-6,8-20,22-25 and 27</u> is/are pending in the application.

　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>3-6,8-20,22-25 and 27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a)☐ All b)☐ Some * c)☐ None of:

　　1.☐ Certified copies of the priority documents have been received.

　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)　　　　　　　Office Action Summary　　　　　　Part of Paper No./Mail Date 20060904

DETAILED ACTION

1.   This action is responsive to Amendment filed on July 7, 2006. Claims 3-6, 8, 11-16, 19,

22 and 24 have been amended. Claims 1-2, 7, 21, 26, 28-29 have been canceled. Claims

3-6, 8-20, 22-25 and 27 are presented for examination.

Response to Arguments

2.   Applicant's arguments with respect to claims 3 and 22 have been considered but are moot

in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

4.   Claims 3-6, 14-16 and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Donohue (US 6,199,204 B1) in view of Redford et al (US 5,711,672 A, "Redford")

of record further in view of Shih et al. (US 6,405,362 B1, "Shih") of record.

Claim 3

Donohue teaches an information processing device (see at least *10* FIG.1 & associated

text) comprising:

o a communication unit adapted to communicate with a server via a network (see at least
   10, 100, 50, 50' FIGs.1,3 & associated text;);

o a portable-information-storage-medium connection unit (i.e., <u>connection step</u>) to which a
   portable information storage medium is connectable, wherein the portable information
   storage medium stores information identifying (i.e., <u>identification information of the</u>
   <u>software AND location information representing a location on the network at which the</u>
   <u>identified</u> <u>software is stored</u>) software to be acquired via a network from a server, and
   has a low capacity for storing the information without storing the software (see at least
   20 FIGs.1,3 & associated text; *updater component 20, diskette, CD* col.6:3-10; *updater*
   component, install time col.8:25-31);

o a reading unit adapted to read the information identifying the software in the storage
   medium (see at least *20* FIGs.1,3 & associated text; *updater component 20, diskette, CD*
   col.6:3-10; *updater component, install time* col.8:25-31)

o a sending unit adapted to send the information identifying the software read by the
   reading unit to the server through the communication unit (see at least *20, 90,*
   220,340,220' FIG.3a & associated text; *300-320* FIG.4B & associated text)

o an information transfer unit (i.e., <u>information transfer step</u>) adapted to automatically
   download the software from the server via the network into an internal storage medium
   (see at least *350* FIG.4B & associated text)

o software storage unit adapted to store the software into a software storage area of the
   internal storage medium, wherein the software is automatically downloaded into the

internal storage medium (see at least *250, 290* FIG.4A & associated text; *40* FIGs.1,3 & associated text);

- o a software management unit (i.e., <u>software management step</u>) adapted to manage the software stored in the software storage area (see at least *20* FIGs.1,3 & associated text);

Donohue does not expressly disclose an unloading detecting unit adapted to detect an unload of the portable information storage medium. However, *Redford* discloses system and method of detecting the insertion and removal of the portable information storage medium containing identification information for applications to be executed (see at least col.1:60-col.2:3; col.2:60-col.3:37) and an unloading detecting unit adapted to detect an unload of the portable information storage medium (see at least *removable storage media, peripheral, autostart driver, application* Abstract; *removable storage media, peripheral, started process, removal, inserted storage media* col.1:60-col.2:3; col.2:65-col.3:20; col.4:10-25; *applications, host device's permanently installed storage media* col.5:35-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of *Redford* into that of *Donohue* for the inclusion of an unloading detecting unit. And the motivation for doing so would have been to facilitate automatic freeing of the random access memory that were used by the executed software and to protect the device from going into an undesirable or unknown state when the portable medium is prematurely removed (see *Redford* Abstract; col.2:60-65).

Donohue as modified by *Redford* does not expressly disclose a deleting unit adapted to delete the software stored into the software storage area when the unload is detected by the unloading

detecting unit. However, *Shih et al.* teach a system and method of detecting removal or disconnection of the portable information storage medium from the connecting unit (e.g., see *Compact Flash memory card, software, removed* col.3:5-20; see *28, 30, 29, 31* FIG.1 & associated text; see col.4:55-60) wherein when the portable information storage medium is disconnected from said portable-information-storage-medium connecting unit, said software management unit performs a deletion process for deleting the software stored in the software storage area (e.g., see *cleaning up, releasing resources* col.3:5-25; col.6:30-55; see *removal message, application 220* col.7:19-30; col.7:60-67). *Donohue* and *Shih et al.* are analogous art because they are both directed to software installation. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made to incorporate the teaching of *Shih et al.* into that of *Donohue* for the inclusion of deletion process (i.e., deleting unit) upon disconnection of portable storage medium. And the motivation for doing so would have been to reduce potential application or system crashes caused by referencing memory on the portable storage medium which has been disconnected and to further free up memory for use by other applications and programs.

Claim 4

The rejection of base claim 3 is incorporated. *Donohue* further teaches wherein from the information identifying the software read from the portable information storage medium, software identification information and location information of a location on the network of the software are extracted and managed by said software management unit (see at least *updater component, locations, network, required software resources* col.3:col.50-col.4:45).

Claim 5

The rejection of base claim 4 is incorporated. *Donohue* further teaches wherein based on an

instruction from said software management unit, said information transfer unit accesses the

server by using the location information, and downloads, into the internal storage medium,

software represented by the software identification information (see at least *updater component,*

locations, network, required software resources col.3:col.50-col.4:45).

Claim 6

The rejection of base claim 3 is incorporated. *Donohue* does not expressly disclose wherein said

software management unit performs a software activating process for executing the software

stored in the software storage area. However, this feature is deemed inherent in the teaching of

Donohue wherein software is downloaded and installed from a network server into an end-user's

computer. It is inconceivable that the end-user's computer does not have the means (i.e.,

software management unit performing software activating process) for executing the software

after it has taken all the necessary steps to download and install the software in the software

storage area.

Claim 14

The rejection of base claim 4 is incorporated. *Donohue* further teaches wherein, when software

represented by the software identification information is not downloaded into the internal

storage medium, said software management unit executes a process for downloading the

software into the internal storage medium (see at least FIGs.3,4A-B & associated text; *pre-requisite software, required resources* col.8:25-col.10:35).

Claim 15

The rejection of base claim 14 is incorporated. Claim recites limitations, which have been addressed in claim 6, therefore, is rejected for the same reasons as cited in claim 6.

Claim 16

The rejection of base claim 4 is incorporated. *Donohue* further teaches wherein:

o when software represented by the software identification information is downloaded into the internal storage medium, said software management unit performs a process for comparing a version of software stored in the server and a version of software stored in the storage medium (see at least *230-260* FIG.4A & associated text);

o said software management unit performs a process for initiating execution of the software in the internal storage medium when both versions match each other (see at least *230-260* FIG.4A & associated text); and

o when the version of the software stored in the server is newer than the version in the internal storage medium, said software management unit performs a process that, after downloading the software from the server into the storage medium, initiates execution of the downloaded software (see at least *230-260* FIG.4A & associated text; *300-310* FIG.4B & associated text).

Claim 22

Claim recites an information processing method comprising the steps performed by the units

addressed in claim 3, therefore, is rejected for the same reasons as cited in claim 3.

Claim 23

Donohue teaches computer-readable storage medium (see at least *20* FIGs.1,3 & associated

text) storing a program for controlling a computer to execute an information processing method

as set forth in claim 22.

Claims 24, 25

Claims recite limitations which have been addressed in claim 3, therefore, are rejected for the

same reasons cited in claim 3.

Claim 27

The rejection of base claim 22 is incorporated. *Donohue* does not expressly disclose when the

portable information storage medium is disconnected while the software downloaded into the

internal storage medium is being executed, said software management step performs an

interruption process for interrupting execution of the software downloaded into the internal

storage medium. However, *Redford* discloses when the portable information storage medium is

disconnected while the software downloaded into the internal storage medium is being executed,

said software management step performs an interruption process for interrupting execution of the

software downloaded into the internal storage medium (see at least *removable storage media,*

peripheral, autostart driver, application Abstract; *removable storage media, peripheral, started*

process, removal, inserted storage media col.1:60-col.2:3; col.2:65-col.3:20; col.4:10-25;

applications, host device's permanently installed storage media col.5:35-67). It would have

been obvious to one of ordinary skill in the art at the time of the invention to incorporate the

teaching of *Redford* into that of *Donohue* for the inclusion of interrupting execution of the

software when the portable medium is removed. And the motivation for doing so would have

been to facilitate automatic freeing of the random access memory that were used by the executed

software and to protect the device from going into an undesirable or unknown state when the

portable medium is prematurely removed (see *Redford* Abstract; col.2:60-65).

5.   Claims 8-11 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

        Donohue in view of Redford in view of Shih further in view of Foster et al. (US

        6,121,967, "Foster") of record.

Claim 8

The rejection of base claim 3 is incorporated. *Donohue* (as modified by *Redford* and *Shih*) does

not expressly disclose wherein, when the portable information storage medium is disconnected

from said portable-information-storage-medium connecting unit while the software downloaded

into the storage medium is being executed, said software management unit performs a medium-

unloading warning process, for warning a user by interrupting execution of the software

downloaded into the storage medium, and a user-input accepting process, for activating a user-

input accepting state after the medium-unloading warning process is performed. However,

Foster teaches wherein, when the portable information storage medium (e.g., see *floppy disk,*

floppy drive col.4:45-55; see *devices, media bays* col.5:1-10) is disconnected from said

portable-information-storage-medium connecting unit while the software stored in the software

storage area is being executed, said software management unit performs a medium-unloading

warning process, for warning a user by interrupting execution of the software stored in the

software storage area (e.g., see *halt processing, removed a "locked" media bay device*

col.2:1:15), and a user-input accepting process (i.e., user selects <u>termination</u> or <u>restarting</u>

execution of software), for activating a user-input accepting state after the medium-unloading

warning process is performed (e.g., see *reinsertion* col.2:5-15; see *412* FIG.4 & associated text;

col.8:60-col.9:25). It would have been obvious to one of ordinary skill in the pertinent art at the

time the invention was made to incorporate the teaching of *Foster* into that of *Donohue* for the

inclusion of medium-unloading warning process, for warning a user by interrupting execution

of the software downloaded into the storage medium, and a user-input accepting process, for

activating a user-input accepting state after the medium-unloading warning process is

performed. And the motivation for doing so would have been to encourage the user against

incorrect removal of portable medium, thus preventing data loss/corruption (see at least *Foster*

col.1:25-col.2:15).

Claim 9

The rejection of base claim 8 is incorporated. *Foster et al.* further teach wherein, when the

portable information storage medium is connected again after the medium-unloading warning

process is performed, said software management unit performs an execution restarting process

for restarting execution of the software (e.g., col.9:15-25).

Claims 10-11

Claims recite limitations, which have been addressed in claims 3 and 8, therefore, are rejected

for the same reasons as cited in claims 3 and 8.

Claim 17

The rejection of base claim 3 is incorporated. *Foster et al.* further teach wherein:

- o when the software is terminated while the portable information storage medium is being

  loaded into said portable-information-storage-medium connecting unit, said software

  management unit displays, on a menu screen, an option for reactivating the software so

  that the software can be reactivated by input from a user (e.g., see *410, 412, 418* FIG.4

  & associated text; see *114, 116* FIG.1B & associated text); and

- o when the portable information storage medium is unloaded after the software is

  terminated (i.e., user selects <u>termination</u> of execution of the software in the user-input

  accepting state), said software management unit performs a process for deleting the

  option for reactivating the software (i.e., software management unit performs a process

  for terminating execution of the software) from the menu screen so that reactivation of

  the software cannot be performed in response to input from a user (e.g., col.2:5-15; see

  412, 414, 416 FIG.4 & associated text; see *118* FIG.1B & associated text).

Claim 18

The rejection of base claim 8 is incorporated.   Claim recites limitations, which have been

addressed in claims 8, and 9, therefore, is rejected for the same reasons as cited in claims 8, and

9.

Claim 19

The rejection of base claim 8 is incorporated. Claim recites limitations, which have been

addressed in claim 17, therefore, is rejected for the same reasons as cited in claim 17.

Claim 20

The rejection of base claim 3 is incorporated. Claim recites limitations, which have been

addressed in claims 3 and 8, therefore, is rejected for the same reasons as cited in claims 3 and

8.

6.   Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue in

view of Redford in view of Shih further in view of Srinivasan (US 6,460,076 B1) of

record.

Claim 12

The rejection of base claim 3 is incorporated. *Donohue* further teaches wherein:

- o the internal storage medium includes a nonvolatile memory (i.e., internal storage) (see at

  least *40* FIGs.1,3 & associated text). *Donohue* does not expressly disclose a volatile

memory. However, this feature <u>is deemed inherent</u> in the teaching of *Donohue* wherein the end-user <u>computer</u> downloads, and installs <u>executable software programs/applications</u>. At the time of applicant's invention, it is well known in the art that volatile memory (i.e., RAM) can be read from and written to and is therefore used for storing application programs and data that can be manipulated and changed. Thus, volatile memory is utilized by the computer's CPU during program execution, and is inherent in the teaching of *Donohue*. *Donohue* does not expressly disclose said software management unit stores a device identification in the nonvolatile memory (i.e., internal storage). However, this feature <u>is deemed inherent</u> in the teaching of *Donohue* because it is inconceivable that a computer operating system functions without maintaining the knowledge and information of the device or hardware (i.e., device identification) it is operating on. Furthermore, it is inconceivable that such device identification should be saved in (i.e., written to) a volatile memory where it can be lost due to system power outage as opposed to a nonvolatile memory where it can later be retrieved for processing during system re/booting. *Donohue* does not expressly disclose storing user information in internal storage and device identification and user information are written to the portable information storage medium. *Donohue* does not expressly disclose when the device identification and the user information are not written, said software management unit writes the device identification and the user information into the portable information storage medium. However, *Srinivasan* teaches an apparatus and method providing for the downloading software from a network server to a user computer wherein user information is provided (e.g., see *authentication, verification* col.4:20-40)

and software (i.e., data or information) is recorded (i.e., written to) in portable media

(e.g., see Abstract; see *VERIFY THAT MEDIA RECORDER IS READY, DOWNLOAD*

FILE TO MEMORY IN USER INTERFACE, TRANSFER FILE TO MEDIA RECORDER

FIG.3 & associated text; see *network, downloadable software, portable media* col.1:60-

col.2:36). *Donohue* and *Srinivasan* are analogous art because they are both directed to

method of downloading software from a network server (i.e., terminal). It would have

been obvious to one of ordinary skill in the pertinent art at the time the invention was

made to incorporate the teaching of *Srinivasan* into that of *Donohue* for the inclusion of

storing user information in internal storage, and writing information (i.e., device

identification and user information) to the portable storage medium. And the motivation

for doing so would have been to provide portability or mobility for these information,

enabling access to these information when the portable storage medium is loaded on and

read by a different device for downloading software or replicating the information to

other portable or non-portable storage media through use of the device.

Claim 13

The rejection of base claim 12 is incorporated. *Donohue* (as modified by *Redford* and *Shih*)

further teaches wherein, after the portable information storage medium is connected to said

portable-information-storage-medium connection unit, said software management unit examines

whether or not the device identification and the user information are written in the portable

information storage medium, and, when the device identification and the user information are

written, and said software management unit finds, by comparing a device identification stored

internally in said information processing device and the device identification written in the

portable information storage medium, identity between both device identifications, said software

management unit initiates accessing of the server terminal (see at least FIGs.4A-B & associated

text).

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
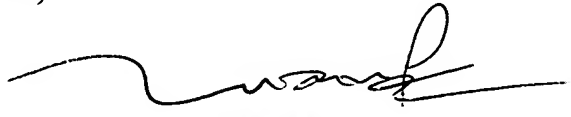
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chrystine Pham whose telephone number is 571-272-

3702. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

CP
September 3, 2006

TUAN DAM
SUPERVISORY PATENT EXAMINER